

# COLUMBIA

HOWARD COUNTY, MARYLAND

6<sup>TH</sup> ELECTION DISTRICT

CONTRACT NO. 483-D-W&S

WATER AND SANITARY PLANS

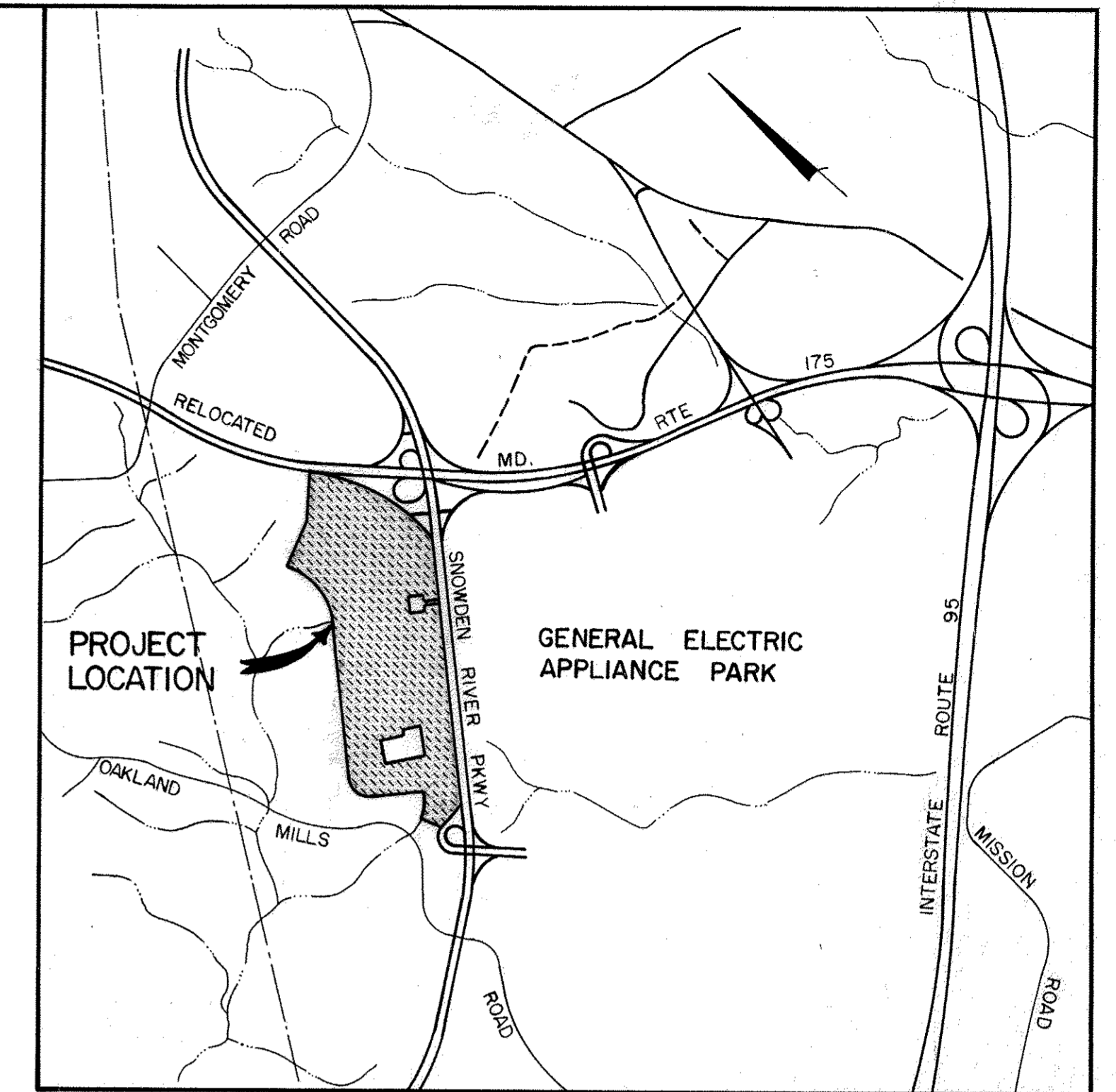
SIELING INDUSTRIAL CENTER

SECTION I AREA I

OWNER AND DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORP

COLUMBIA, MARYLAND

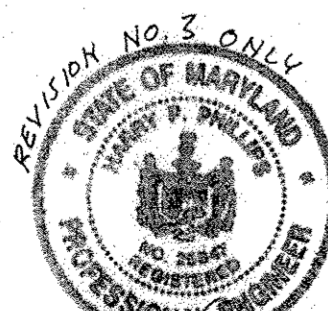
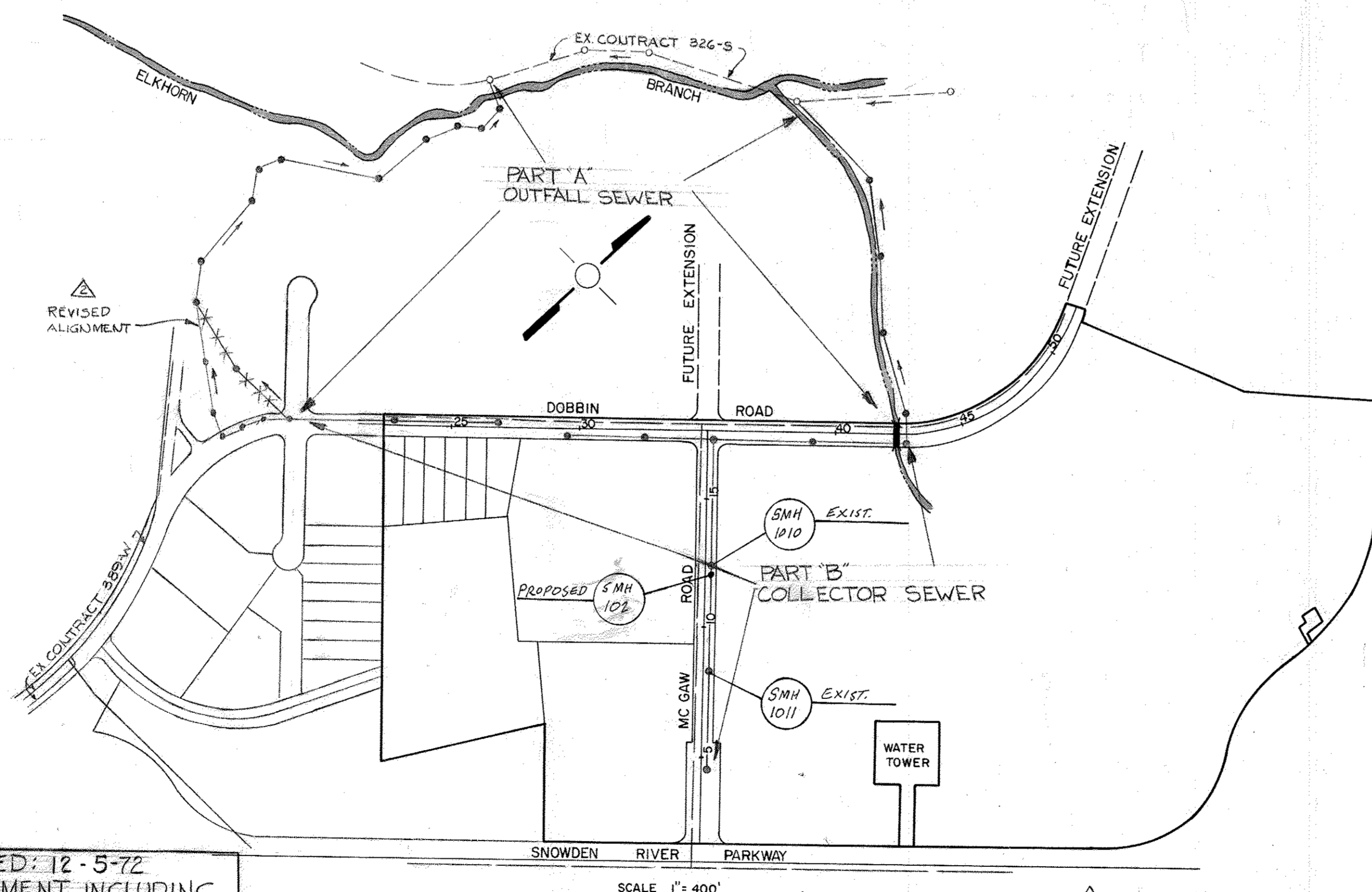


VICINITY MAP  
SCALE: 1"=2000'

GENERAL NOTES

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT  $\ominus$  ELEVATIONS.
- THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN VICINITY OF UTILITIES.
- FOR ALL STANDARD DETAILS SEE STANDARDS BOUND IN SPECIFICATIONS.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
- ALL HORIZONTAL AND VERTICAL CONTROLS ARE BASED ON MARYLAND STATE DATUM.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- ALL WATER MAINS TO HAVE A MIN. OF 3 1/2' COVER UNLESS OTHERWISE NOTED.
- BLOCK ALL FITTINGS WITH CONCRETE, SEE STANDARDS BOUND IN SPECIFICATIONS.
- BURY LINE ELEVATIONS ON FIRE HYDRANTS SHALL BE SET TO THE ELEVATIONS SHOWN ON DRAWINGS.
- ALL FIRE HYDRANTS SHALL BE STRAPPED TO THE TEE & SHALL BE BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS.
- COST OF STRAPPING FIRE HYDRANTS & VALVES TO TEES TO BE INCLUDED IN UNIT PRICE BID FOR FURNISHING & LAYING OF WATER MAINS.

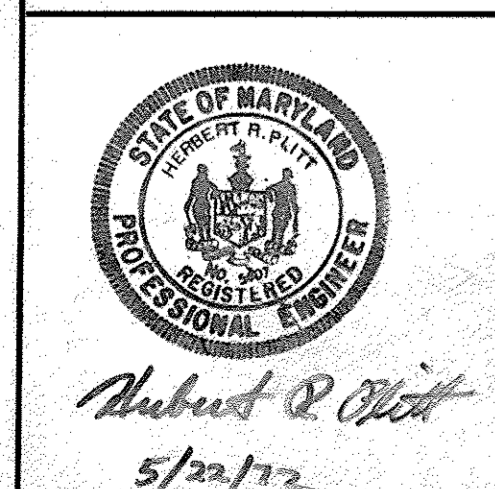
QUANTITIES	
ITEM	QUANTITY
30"x16" TAPPING SLEEVE & 16" VALVE	1
16" VALVES	4
6" WATER	190'
16" WATER	4565'
8" WATER	70'
FIRE HYDRANTS (6")	8
16" x 6" TEES	11
16" x 8" TEE	1
6" VALVES	11
STD. MANHOLES	29
TYPE "A" DROP CONN.	1
8" SANITARY	3939'
10" SANITARY	3843'
16" x 10" TEE	1
10" VALVE	1
10" WATER	8'
AIR RELEASE VALVE (2")	4
8" VALVE	1
6" SANITARY	94'
6" SANITARY	10'
MANHOLE BUILT OVER EXISTING GS-14	1
TYPE "B" DROP CONN.	1



SHEET Nos. 2, 5, 6, 7, 2A REVISED: 12-5-72  
FOR PARTIAL SEWER REALIGNMENT INCLUDING THREE ADDITIONAL MANHOLES AND LOWERING OF THREE MANHOLES.  
APPROVED: *W. O. Walbert* 12-5-72  
CHIEF, BUREAU OF ENGINEERING DATE

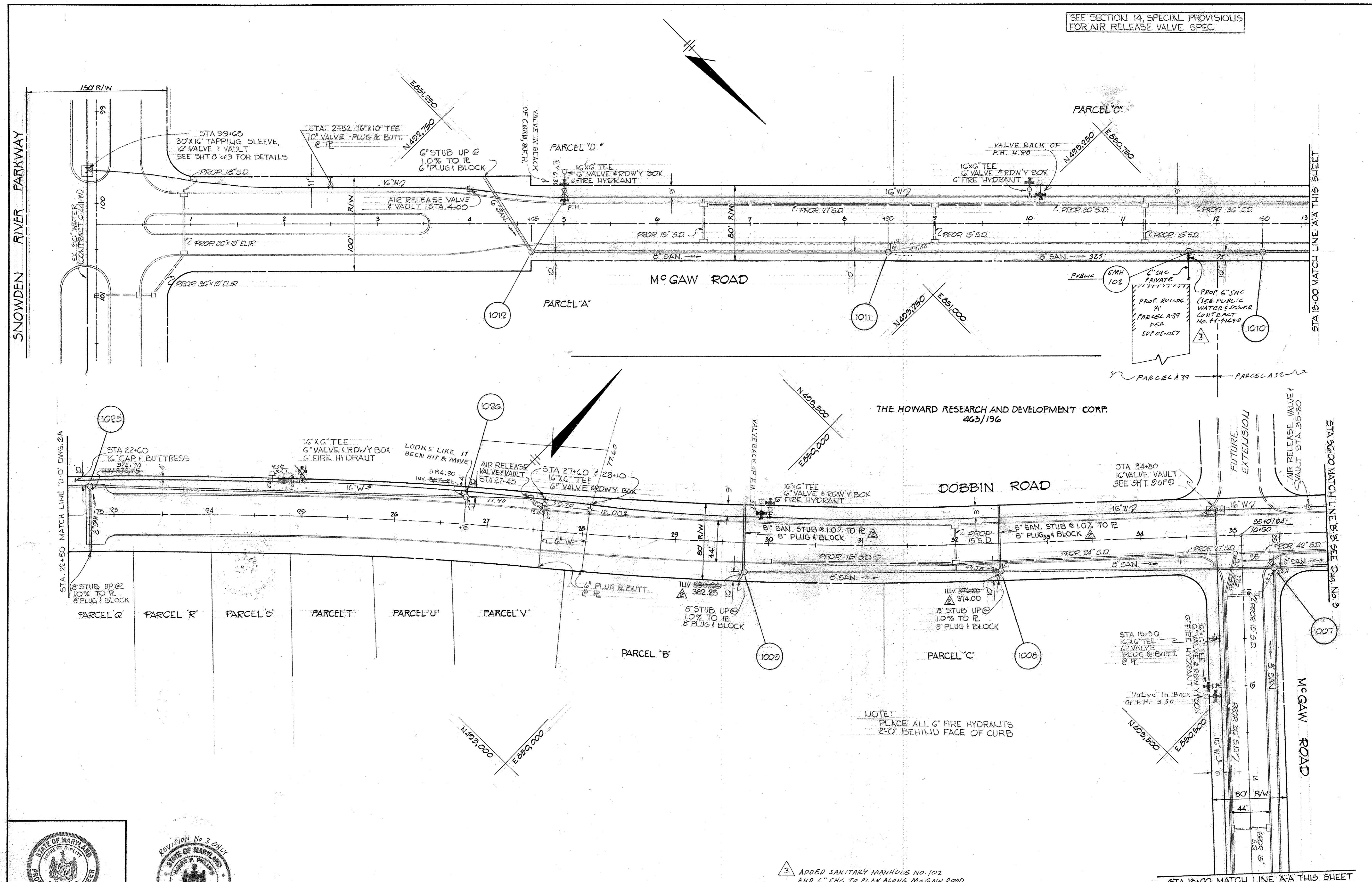
3 ADDER QUANTITIES FOR SEWER HOUSE CONNECTION TO BUILDING 'A' ALONG MCGAW ROAD PER WATER AND SEWER CONTRACT NO. 44-4269-D AND SITE PLAN SPP 05-057. BY GWS DATED 9/29/05.

2 ADDITION & REVISION



GREEN ASSOCIATES, INC. CONSULTING ENGINEERS BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 9.6.72 DATE <i>W. O. Walbert</i> CHIEF - BUREAU OF WATER AND SEWER	CONTRACT NO. 483-D-W&S	TITLE SHEET	COLUMBIA SIELING INDUSTRIAL CENTER ELECTION DISTRICT GUILFORD NO 6	DRAWING NO. 1 OF 9	SCALE
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SEE SECTION 14, SPECIAL PROVISIONS FOR AIR RELEASE VALVE SPEC.



NOTE: PLACE ALL 6" FIRE HYDRANTS 2'-0" BEHIND FACE OF CURB

3 ADDED SANITARY MANHOLE NO. 102 AND 6" SHC TO PLAN ALONG MCGAW ROAD FOR PUBLIC WATER AND SEWER CONTRACT NO. 44-4267-D AND SITE PLAN SOP 05-057, BY G.W. STAPLENS DATED 9/29/05.

2 ADDITION & REVISION 11-23-72

DATE: 12-5-72  
REVISED FOR LOWERING OF MANHOLES 1008, 1009, 1026 & MINOR CHANGE TO MH 1025  
FOR PROFILE SEE DRAWING No. G-47

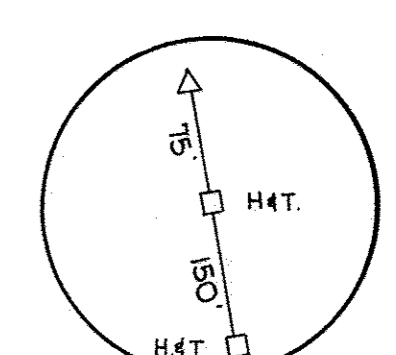
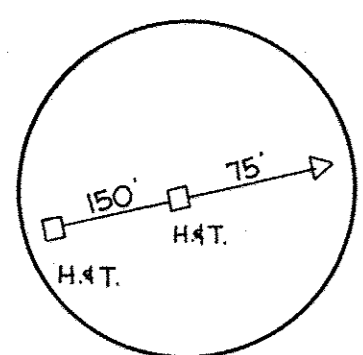
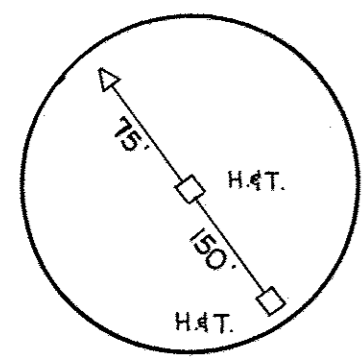
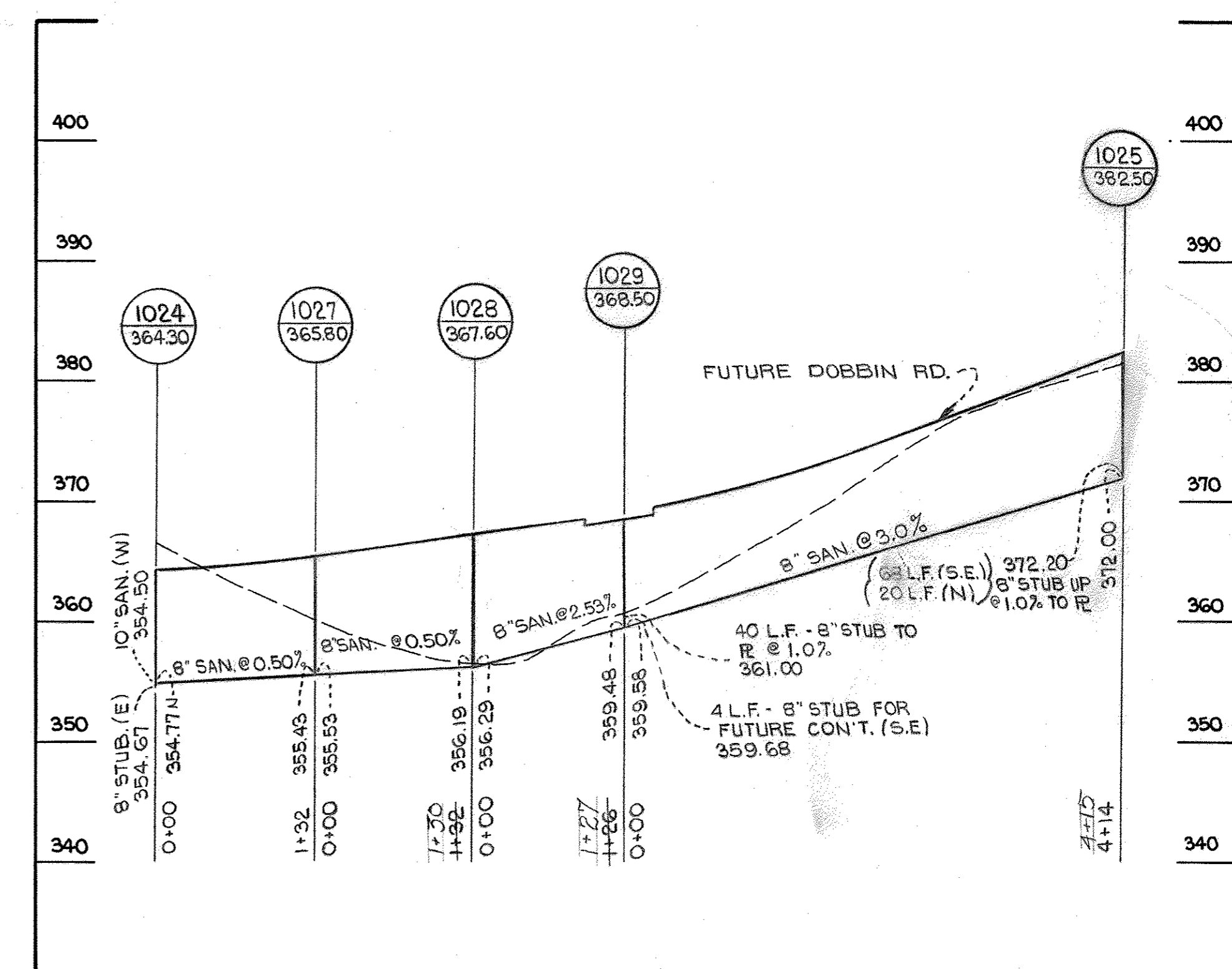
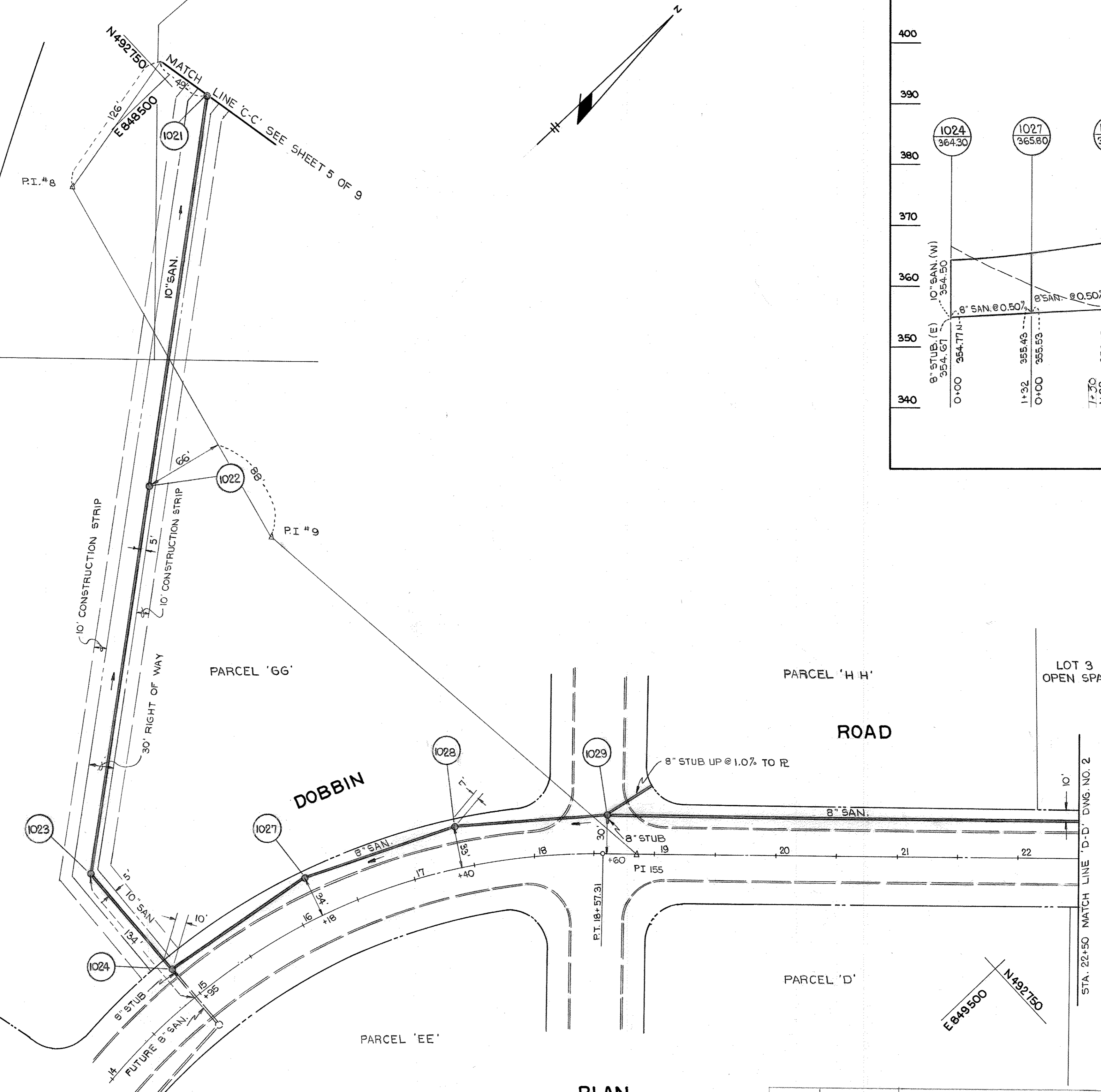
STATE OF MARYLAND  
REGISTERED PROFESSIONAL ENGINEER  
Hubert R. Christ  
5/22/72

REVISION No. 3 ONLY  
STATE OF MARYLAND  
REGISTERED PROFESSIONAL ENGINEER  
W. O. Filbert  
9/29/05

GREEN ASSOCIATES, INC. CONSULTING ENGINEERS BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 9-6-72 DATE	CONTRACT NO. 483-D-W85 W. O. Filbert CHIEF - BUREAU OF WATER AND SEWER	PLAN OF WATER AND SEWER MAINS	COLUMBIA SIELING INDUSTRIAL CENTER ELECTION DISTRICT GUILFORD NO 6	DRAWING NO. 2 OF 9	SCALE 1" = 50'
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OAKLAND MILLS ROAD

E 848750  
N 492250



No.	DATE	REVISION
1	5/30/17	CURED-IN-PLACE-PIPE LINING FROM MANHOLE 1021 TO MANHOLE 1024

DATE: 12-5-72  
THIS SHEET ADDED TO SHOW  
REVISED SEWER  
ALIGNMENT MH 1021 TO MH 1029  
WITH PROFILES

GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
12-5-72  
DATE  
W. O. Falbert  
CHIEF - BUREAU OF WATER AND SEWER

CONTRACT NO. 483-D-W8S

PLAN & PROFILE OF  
SEWER MAIN

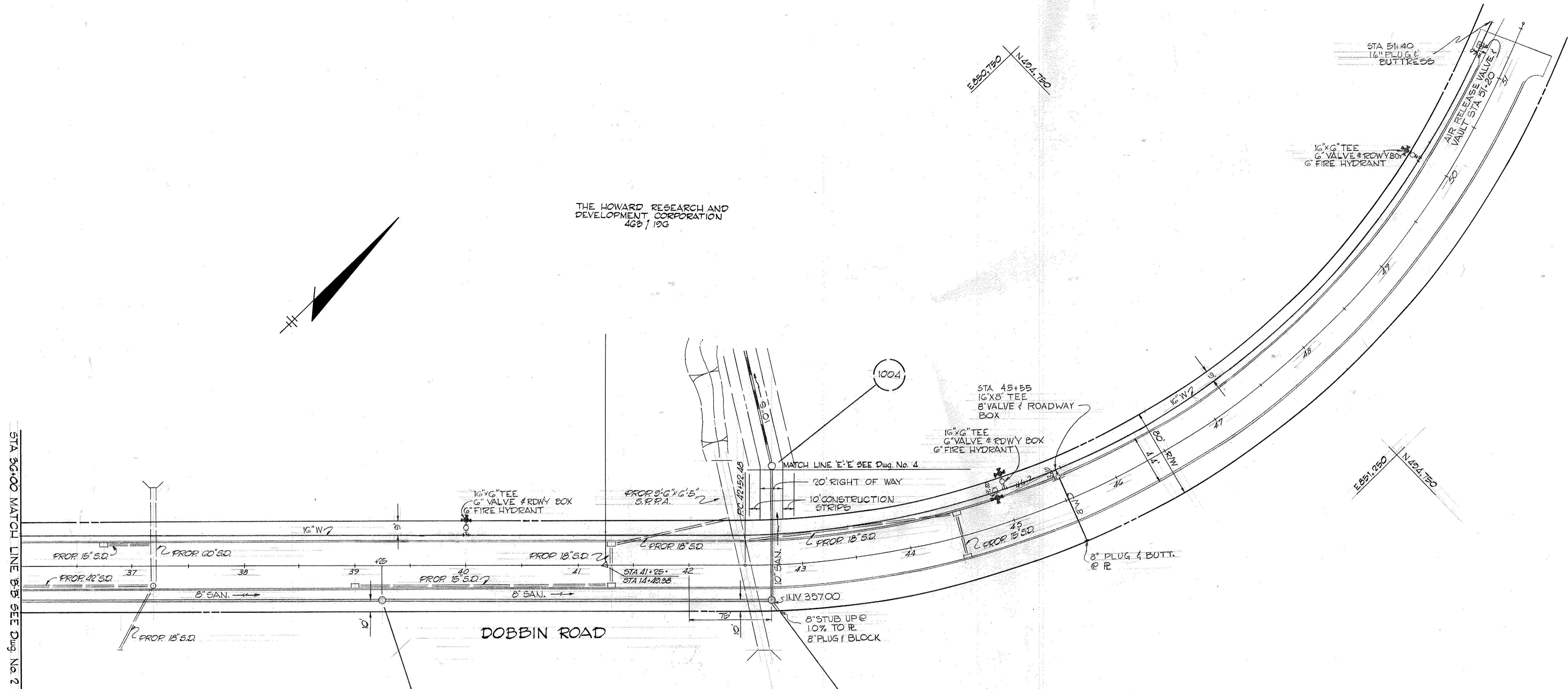
COLUMBIA  
SIELING INDUSTRIAL CENTER  
ELECTION DISTRICT GUILFORD NO. 6

DRAWING NO. 2A OF 9  
SCALE AS SHOWN

WS 493 WTS/2-A

SEE SECTION 14, SPECIAL PROVISIONS FOR AIR RELEASE VALVE SPEC

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
402 1 196



NOTE  
PLACE ALL 6\"/>



GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
9-6-72  
W. O. Filbert  
CHIEF - BUREAU OF WATER AND SEWER

CONTRACT NO. 483-D-W&S

PLAN OF  
WATER AND SEWER MAINS

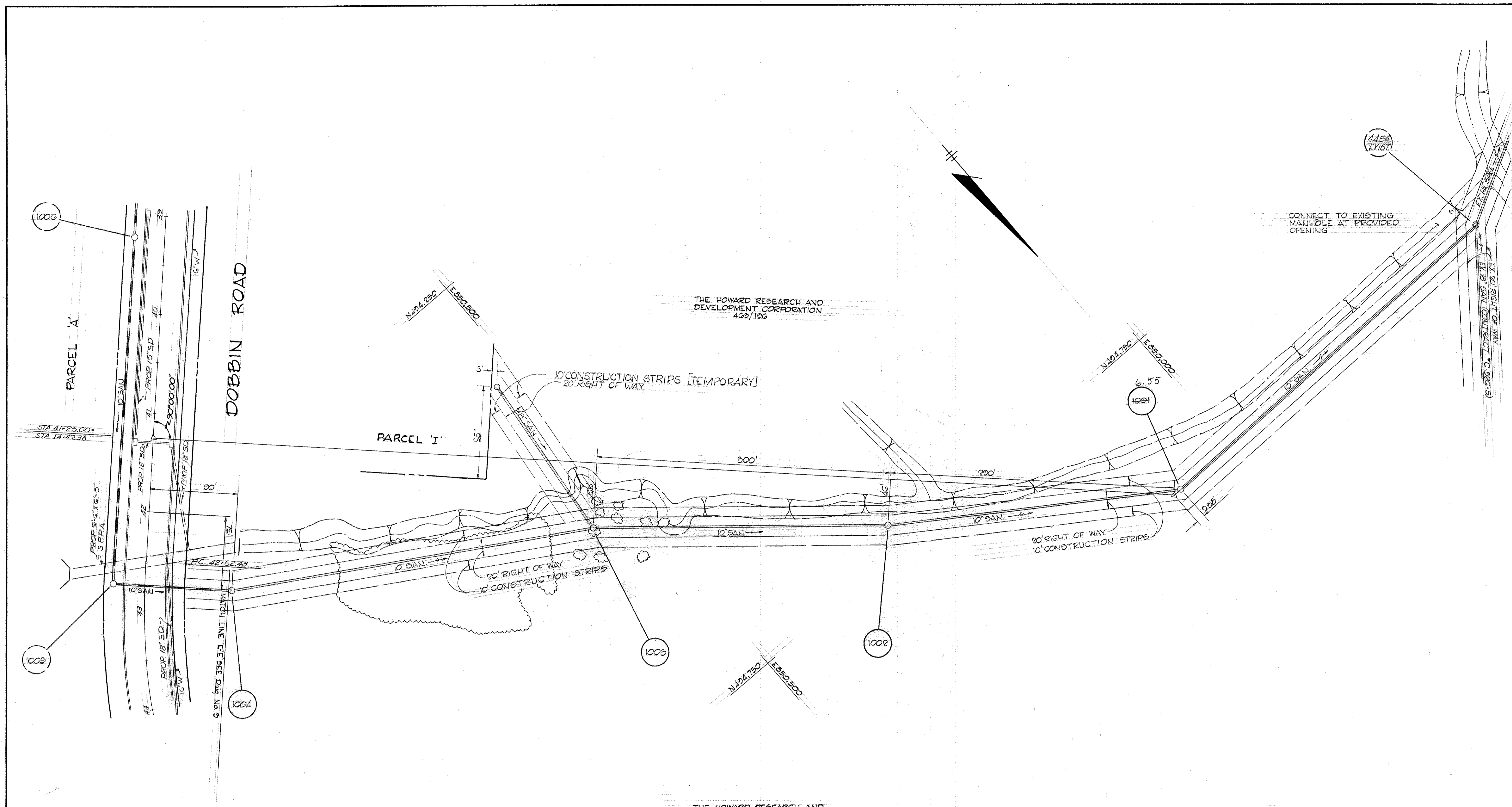
COLUMBIA  
SIELING INDUSTRIAL CENTER  
ELECTION DISTRICT GUILFORD NO 6


DRAWING NO. 3 OF 9  
SCALE 1" = 50'

FOR PROFILE SEE DRAWING No. G

OCT. 7, 1974  
AS BUILT 4/26/74

WS 483-D-W&S/3



  
 Robert R. O'Neil  
 5/22/72

**GREEN ASSOCIATES, INC.**  
 CONSULTING ENGINEERS  
 BALTIMORE, MARYLAND

**DEPARTMENT OF PUBLIC WORKS**  
 HOWARD COUNTY, MARYLAND  
 DATE: 9-6-72  
 W. O. Falbert  
 CHIEF - BUREAU OF WATER AND SEWER

CONTRACT NO. 483-D-W&S

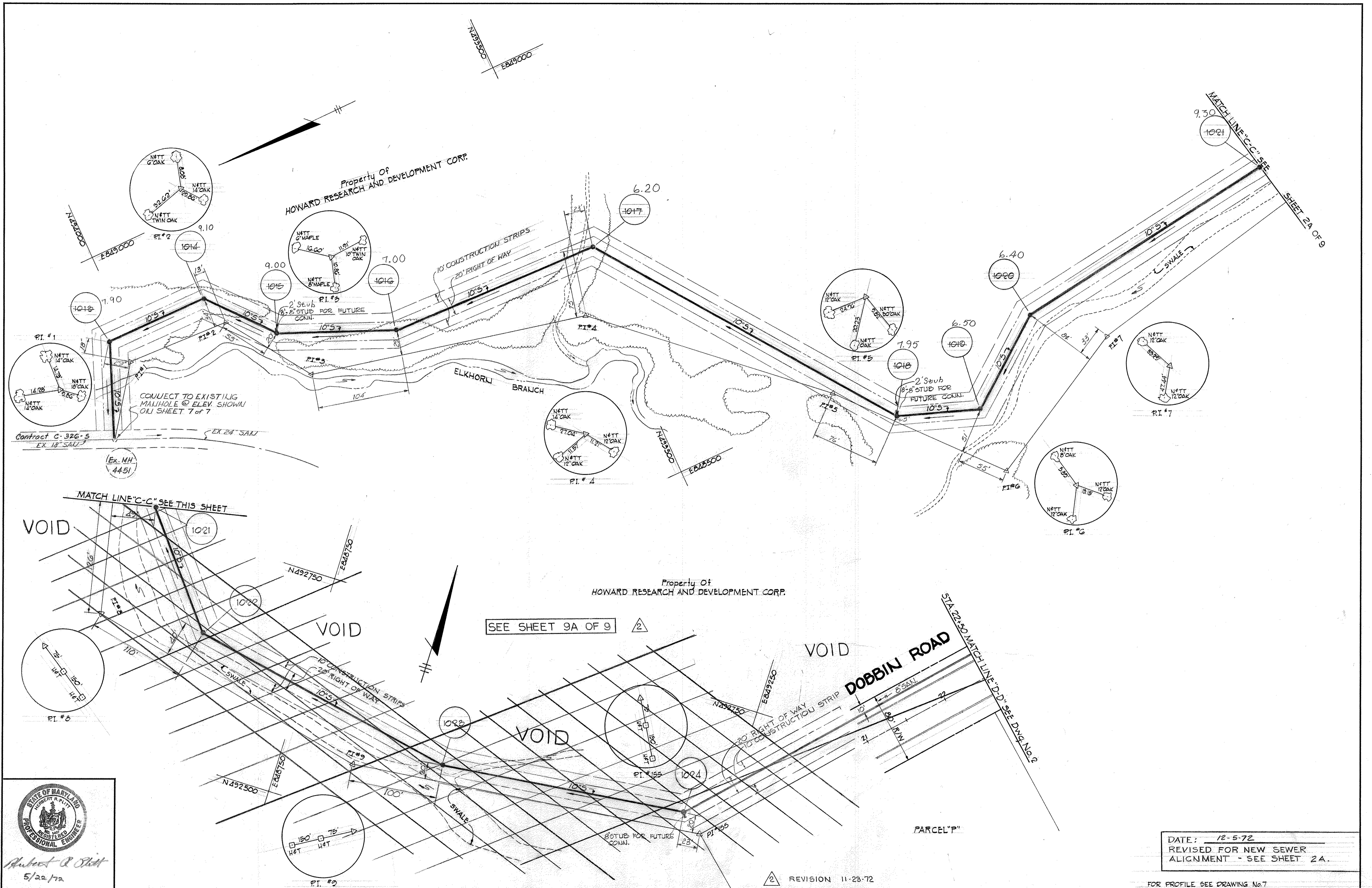
PLAN OF  
 WATER AND SEWER MAINS

COLUMBIA  
 SIELING INDUSTRIAL CENTER  
 ELECTION DISTRICT GUILFORD NO 6

DRAWING NO. 4 OF 9  
 SCALE 1" = 50'

FOR PROFILE SEE DRAWING No. 7

WS 483-W&S/4



DATE: 12-5-72  
 REVISED FOR NEW SEWER ALIGNMENT - SEE SHEET 2A.

FOR PROFILE SEE DRAWING No. 7

REVISION 11-23-72

STATE OF MARYLAND  
 ROBERT R. BISH  
 REGISTERED PROFESSIONAL ENGINEER  
 5/22/72

GREEN ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 BALTIMORE, MARYLAND

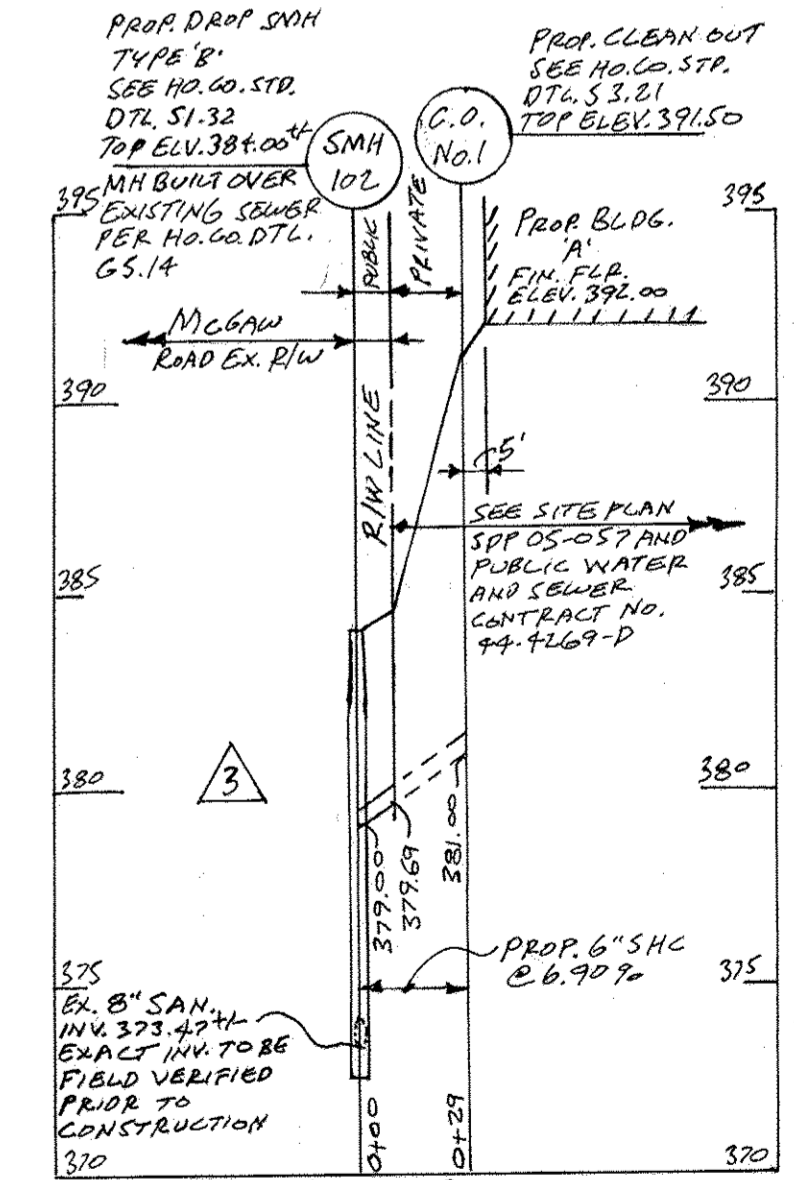
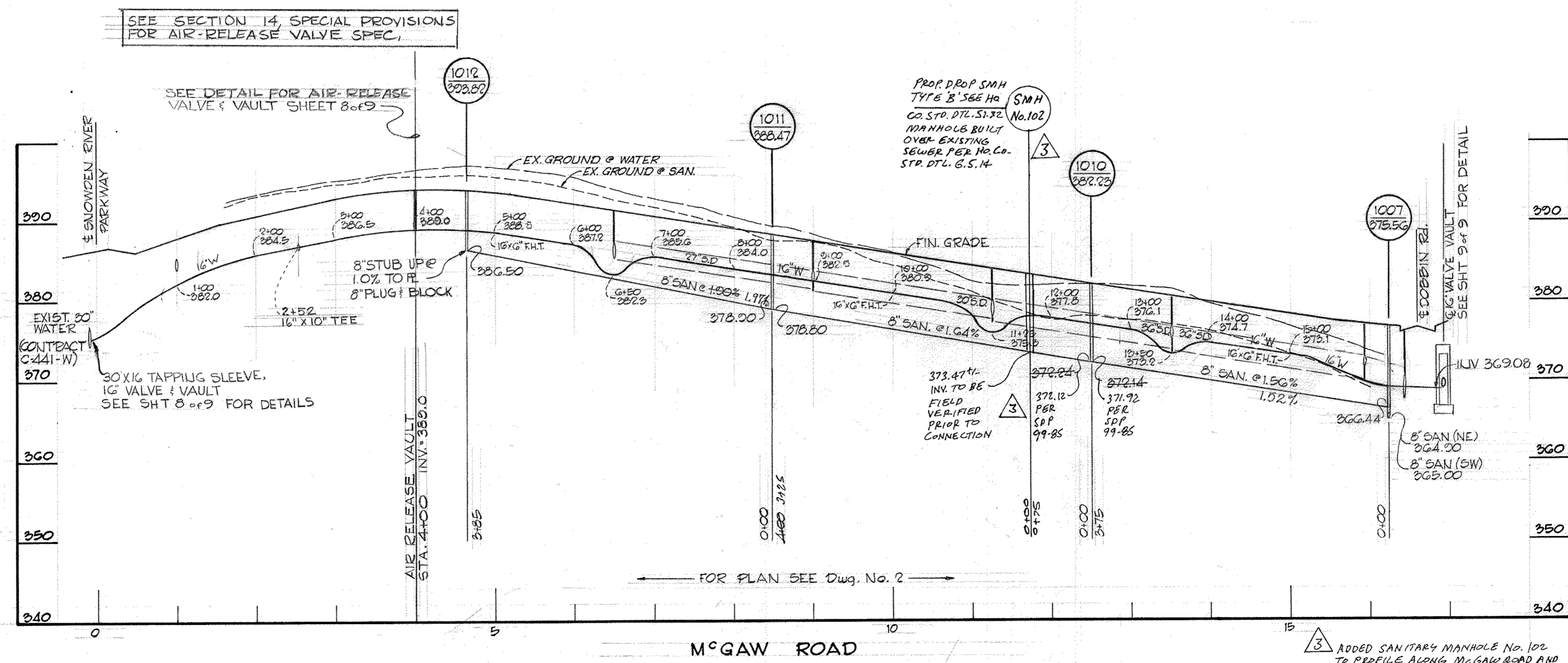
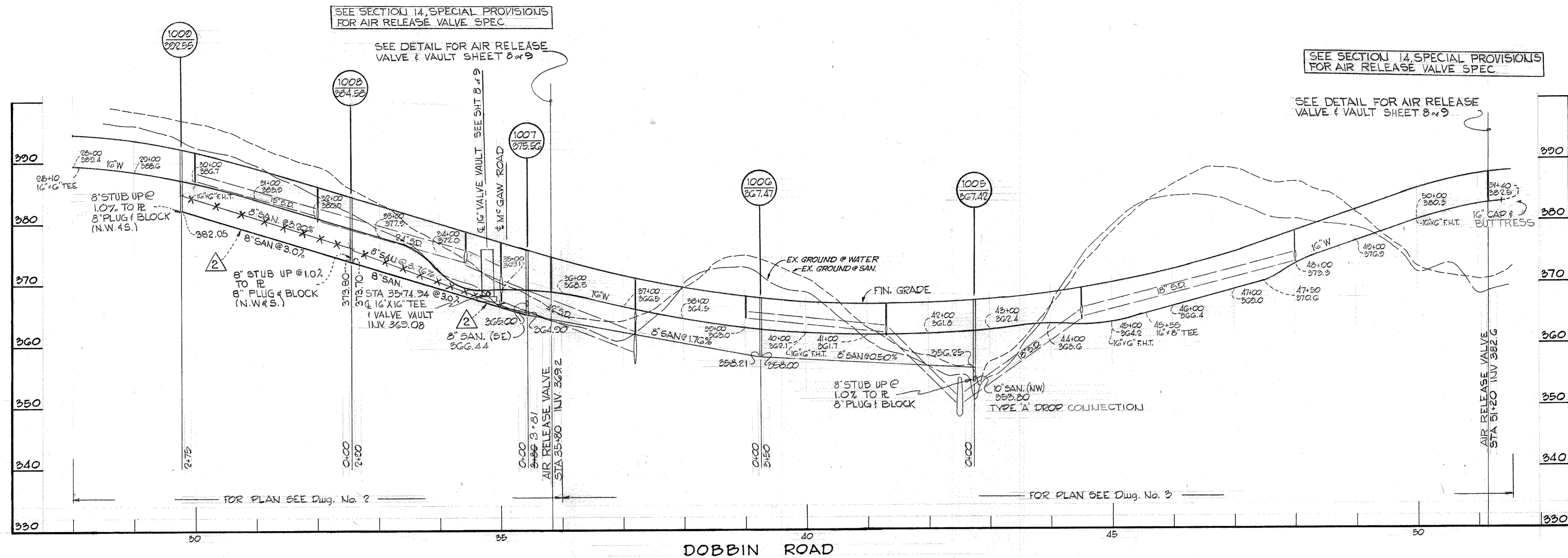
DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 9-6-72  
 DATE

CONTRACT NO. 483-D-W8S

PLAN OF  
 WATER AND SEWER MAINS

COLUMBIA  
 SIELING INDUSTRIAL CENTER  
 ELECTION DISTRICT GUILFORD NO 6

DRAWING NO. 5 OF 9  
 SCALE 1"=50'



STATE OF MARYLAND  
 PROFESSIONAL ENGINEER  
 Robert R. Olt  
 5/22/72

REVISION No. 3 ONLY  
 STATE OF MARYLAND  
 PROFESSIONAL ENGINEER  
 H. J. [Name]  
 9/29/05

GREEN ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 9-6-72  
 DATE

W. O. Falbert  
 CHIEF - BUREAU OF WATER AND SEWER

CONTRACT NO. 483-D-W&S

PROFILE OF  
 WATER AND SEWER MAINS

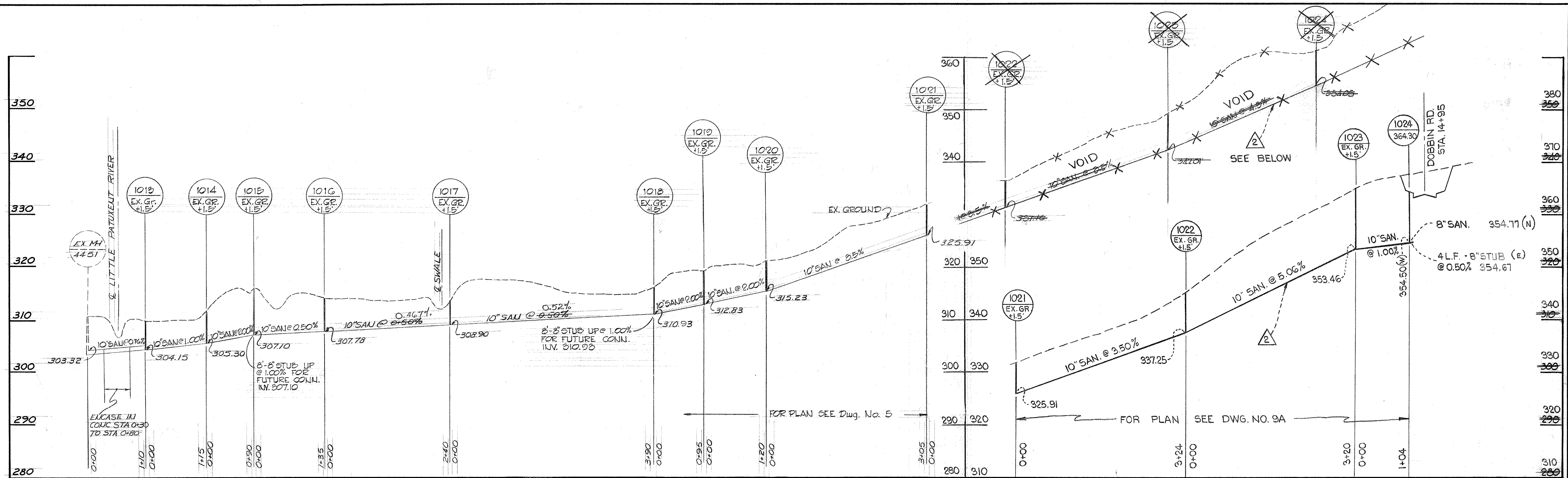
COLUMBIA  
 SIELING INDUSTRIAL CENTER  
 ELECTION DISTRICT GUILFORD NO 6

DRAWING  
 NO. 6  
 OF 9

SCALE  
 VERT. 1"=10'  
 HORZ. 1"=100'

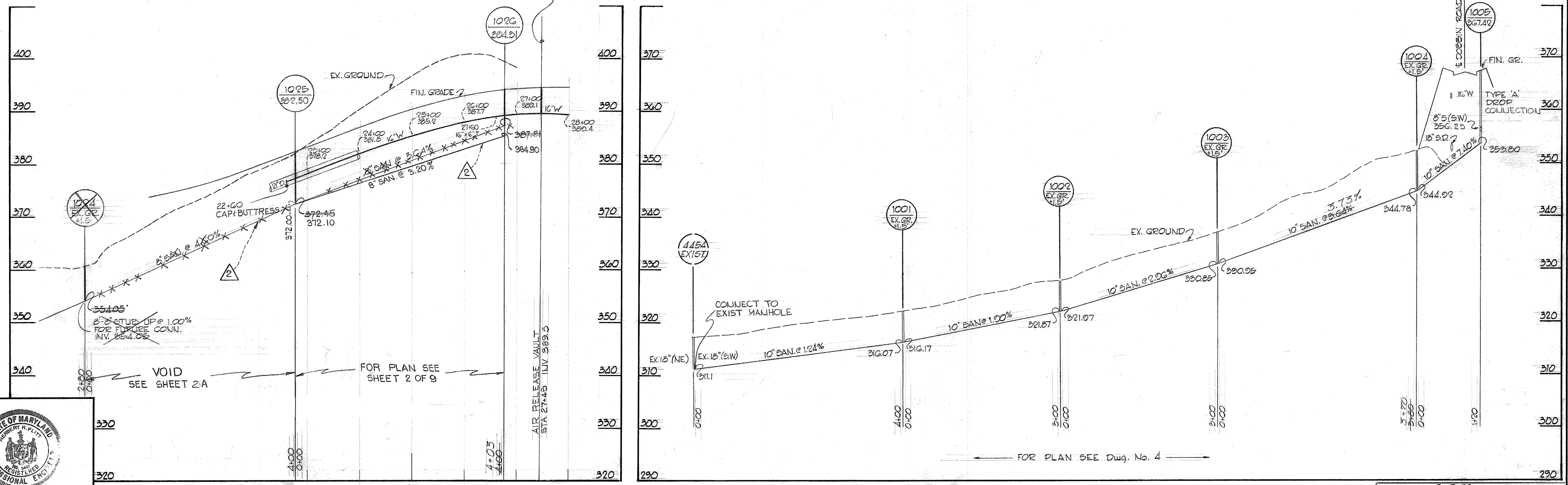
ADDED SANITARY MANHOLE No. 102  
 TO PROFILE ALONG MCGAW ROAD AND  
 ADDED SEWER HOUSE CONNECTION  
 PROFILE FOR BLDG. A PER W&S CONTRACT  
 NO. 44-4267-P AND S.D.P.O.S.-057 BY G.W.S. DATED 9/29/05

DATE: 12-5-72  
 REVISED PROFILE DUE TO  
 LOWERING MANHOLES 1008 &  
 1009



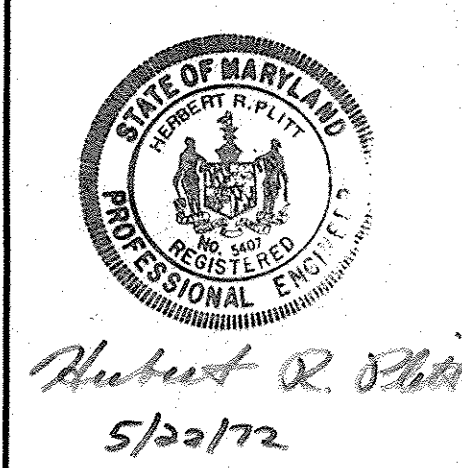
SEE SECTION 14, SPECIAL PROVISIONS FOR AIR RELEASE VALVE SPEC.

SEE DETAIL FOR AIR RELEASE VALVE & VAULT SHEET 8 OF 9



ADDITION 4 REVISION 11-23-72

DATE: 12-5-72  
REVISED FOR PROFILE CHANGES AS INDICATED



**GREEN ASSOCIATES, INC.**  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND

**DEPARTMENT OF PUBLIC WORKS**  
HOWARD COUNTY, MARYLAND  
9-6-72  
DATE

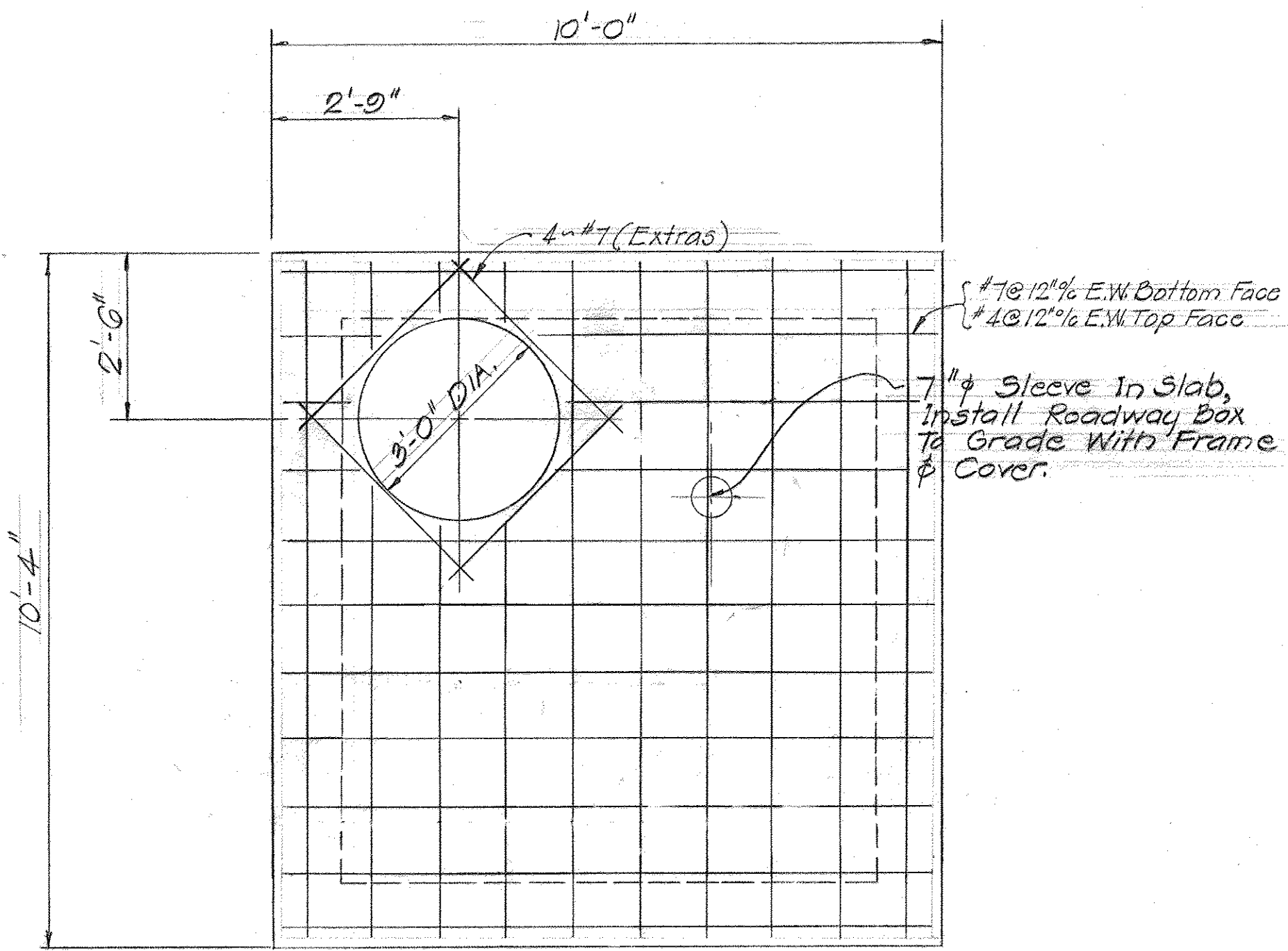
**CONTRACT NO. 483-D-W&S**

**PROFILE OF WATER AND SEWER MAINS**

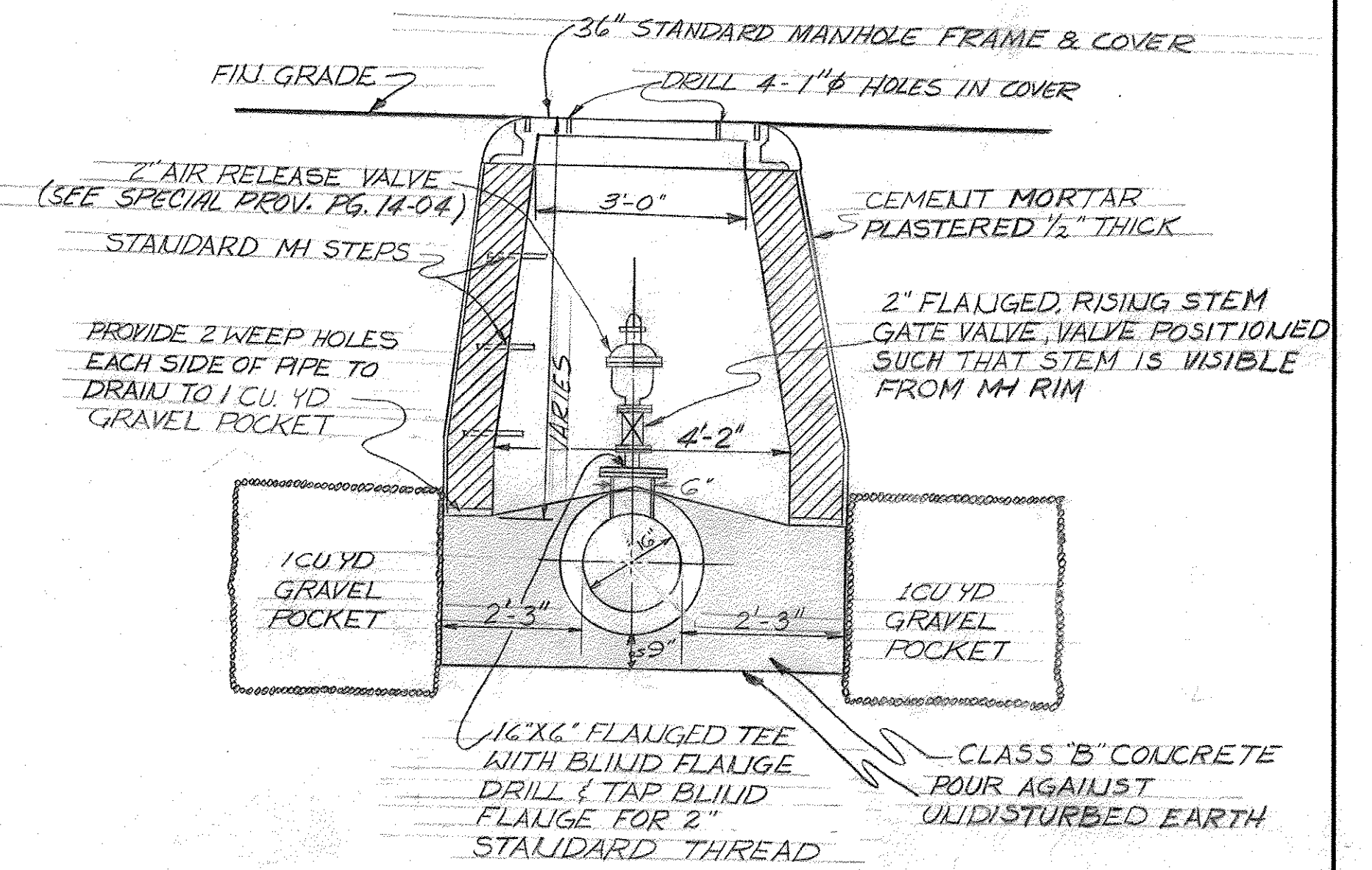
**COLUMBIA SIELING INDUSTRIAL CENTER**  
ELECTION DISTRICT GUILFORD NO 6

**DRAWING NO. 7 OF 9**  
SCALE: VERT 1"=10', HORZ 1"=100'

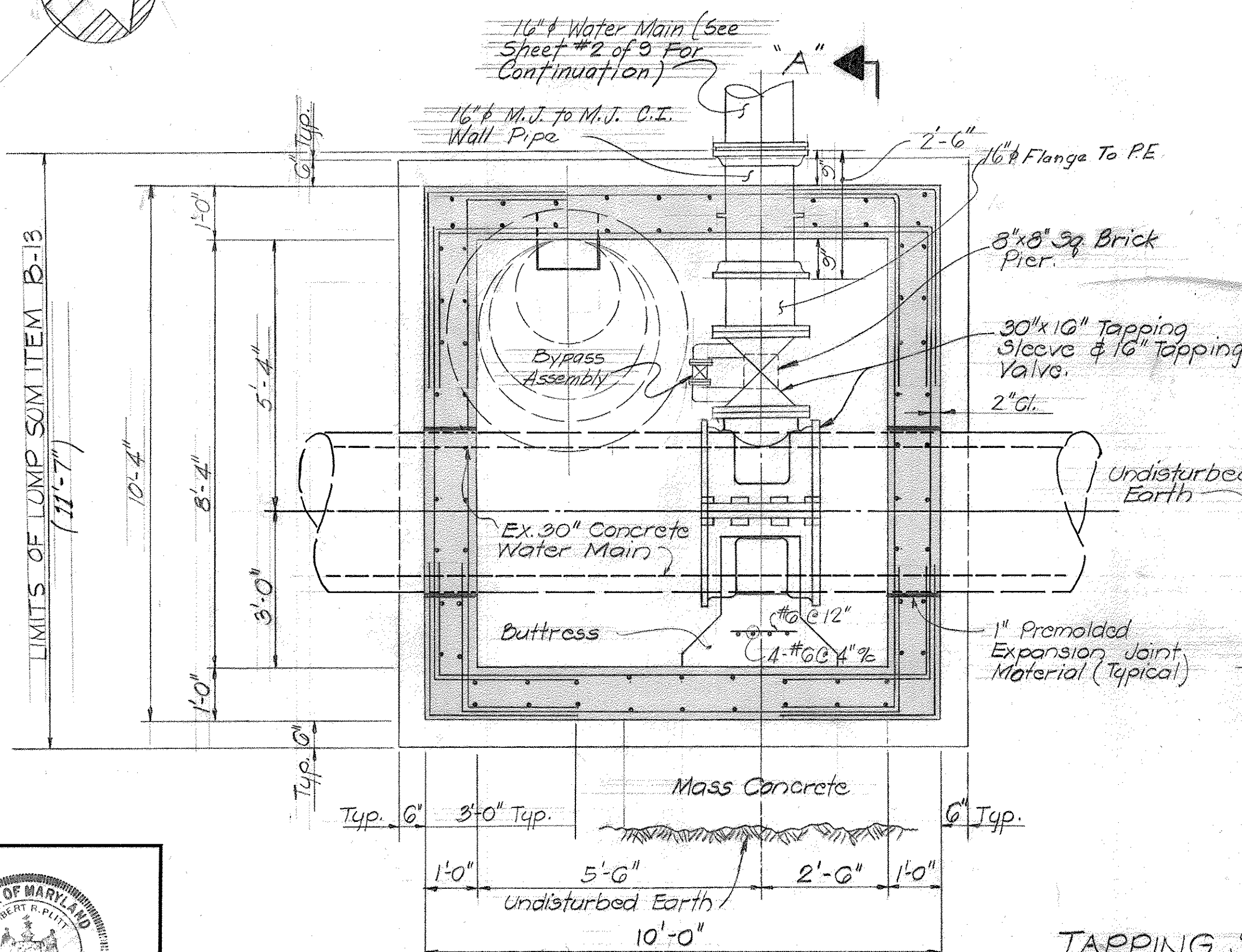




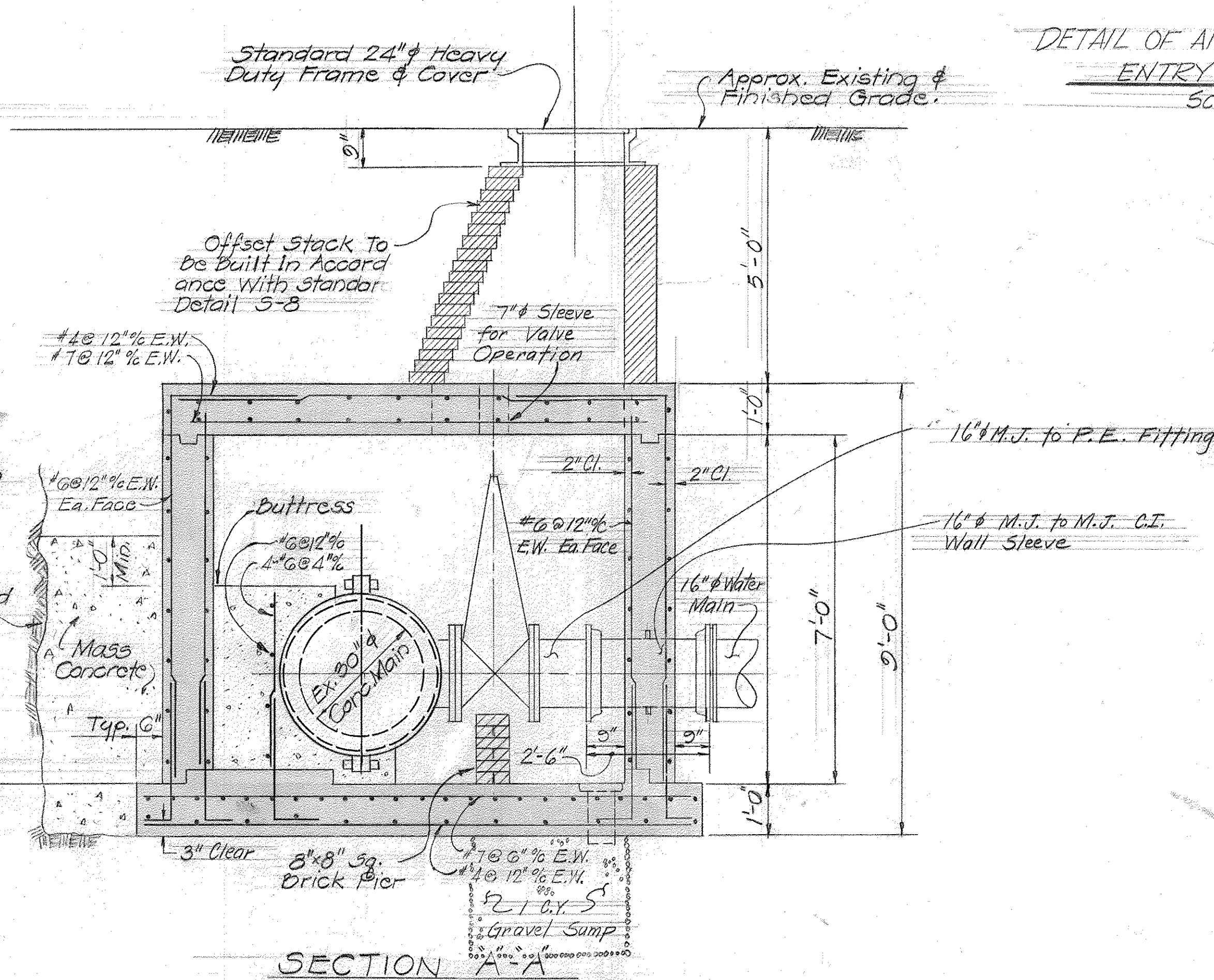
PLAN TOP SLAB



DETAIL OF AIR RELEASE AND ENTRY PORT MANHOLE  
Scale: 1/2" = 1'-0"



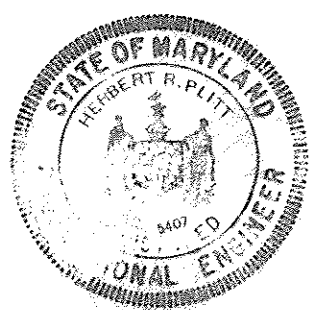
PLAN TOP SLAB REMOVED



SECTION A-A

TAPPING SLEEVE AND VALVE VAULT

Scale: 1/2" = 1'-0"



Robert R. O'Neil

GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
7-6-72  
W O Fulbert  
CHIEF - BUREAU OF WATER AND SEWER

CONTRACT NO. 483-D-WBS

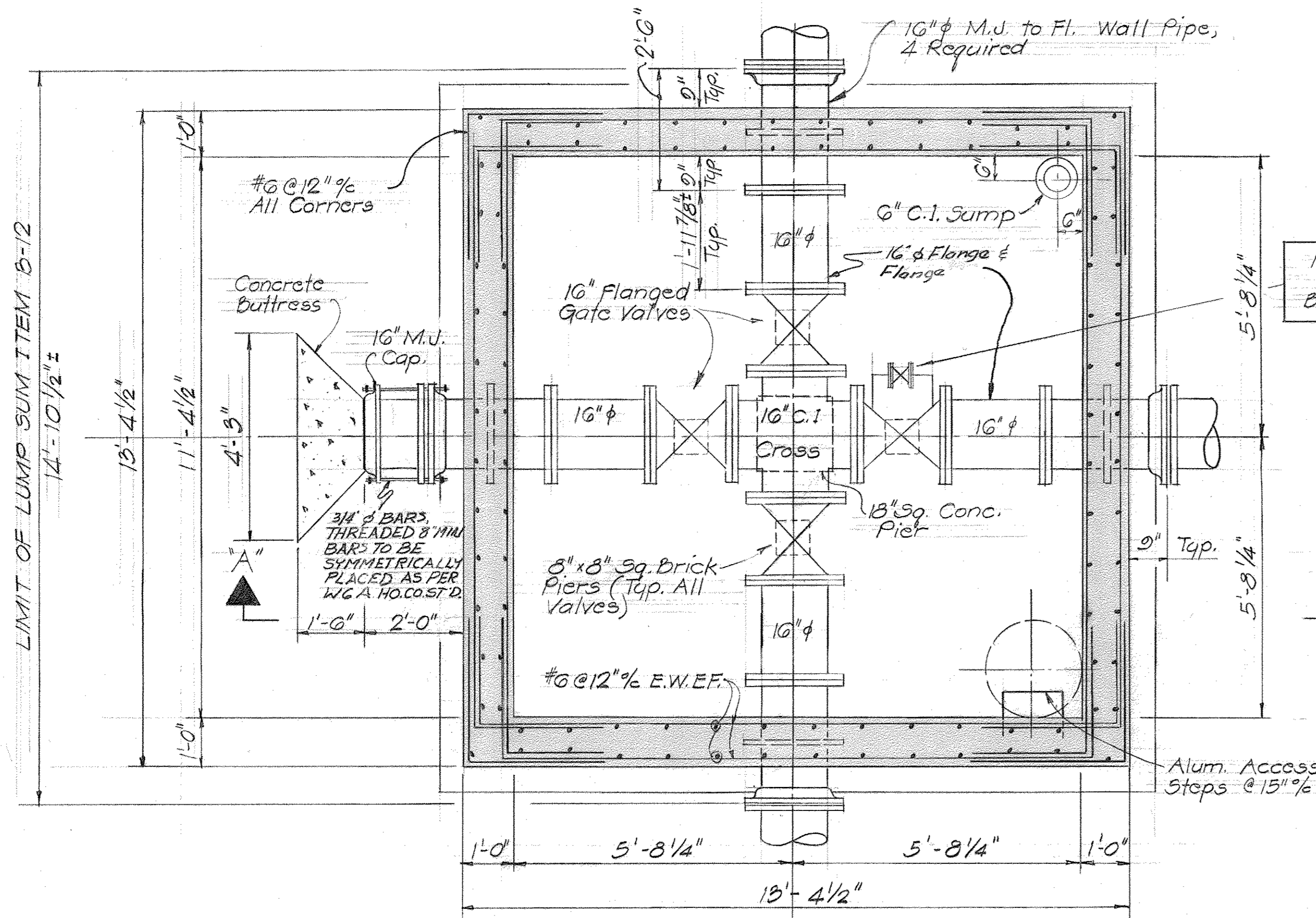
TAPPING SLEEVE & VALVE VAULT

COLUMBIA  
SIELING INDUSTRIAL CENTER  
ELECTION DISTRICT GUILFORD NO 6

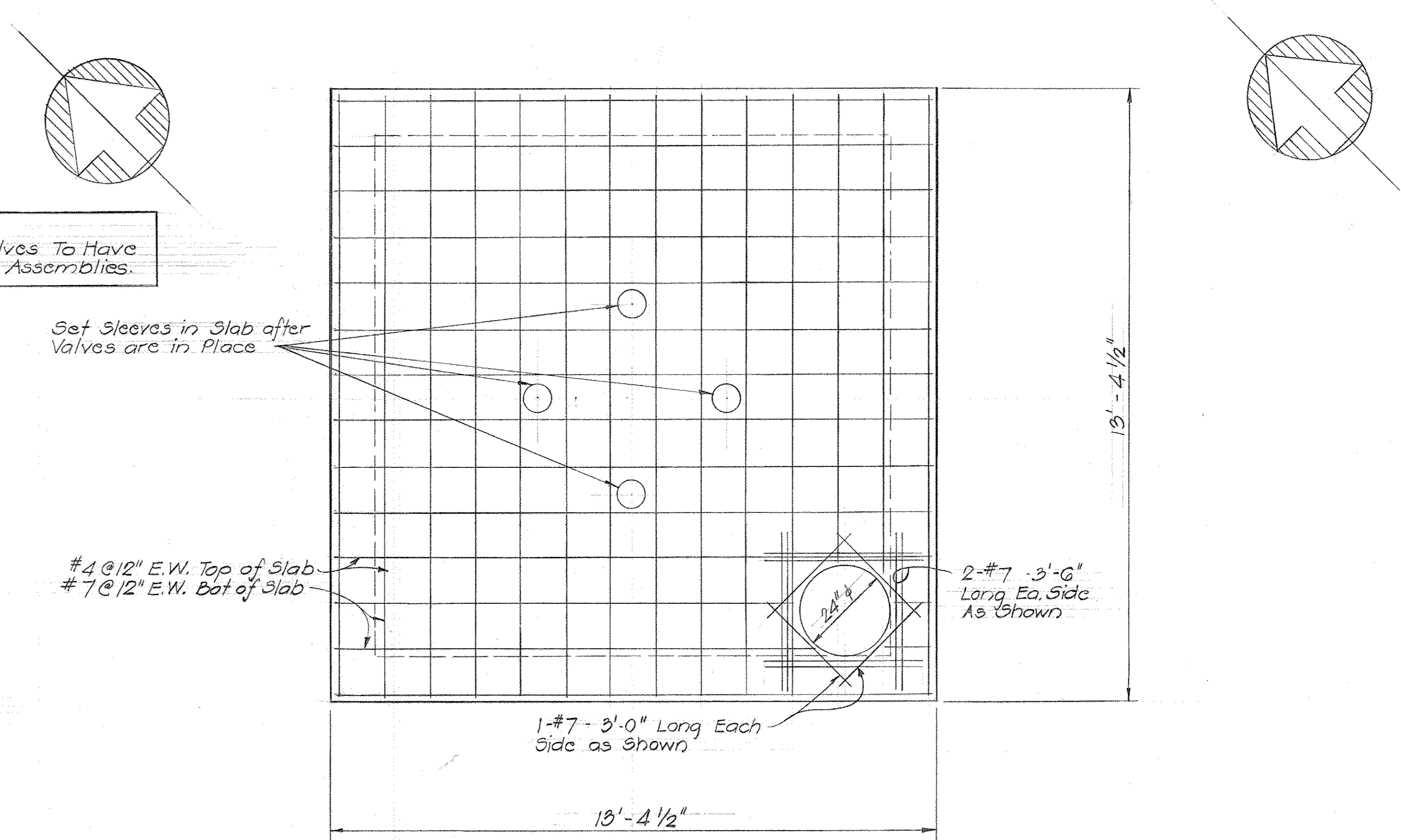
DRAWING  
NO. 8  
OF 9

SCALE  
1/2" = 1'-0"

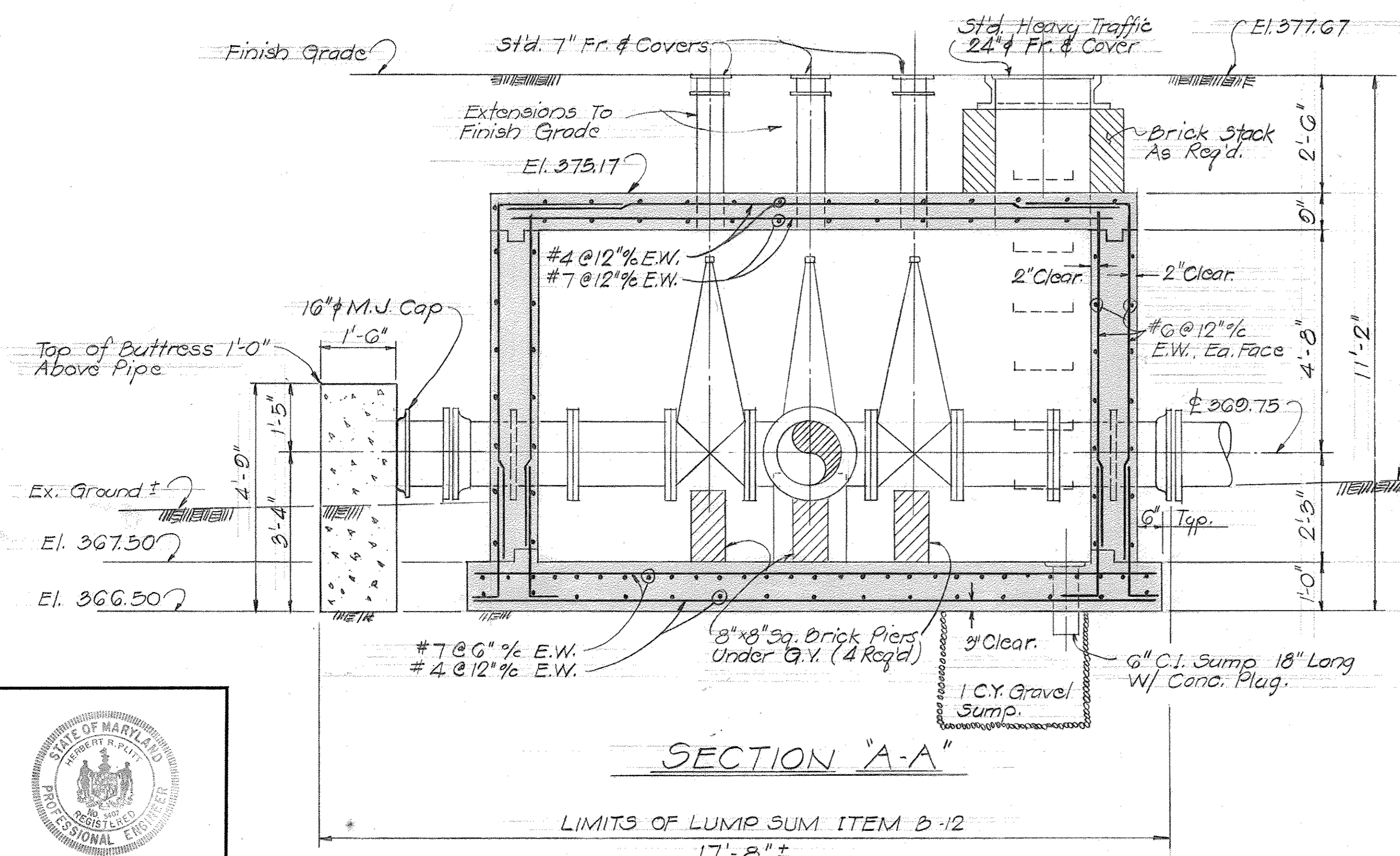
WS 483 .WAS/8



PLAN - TOP SLAB REMOVED



PLAN - TOP SLAB

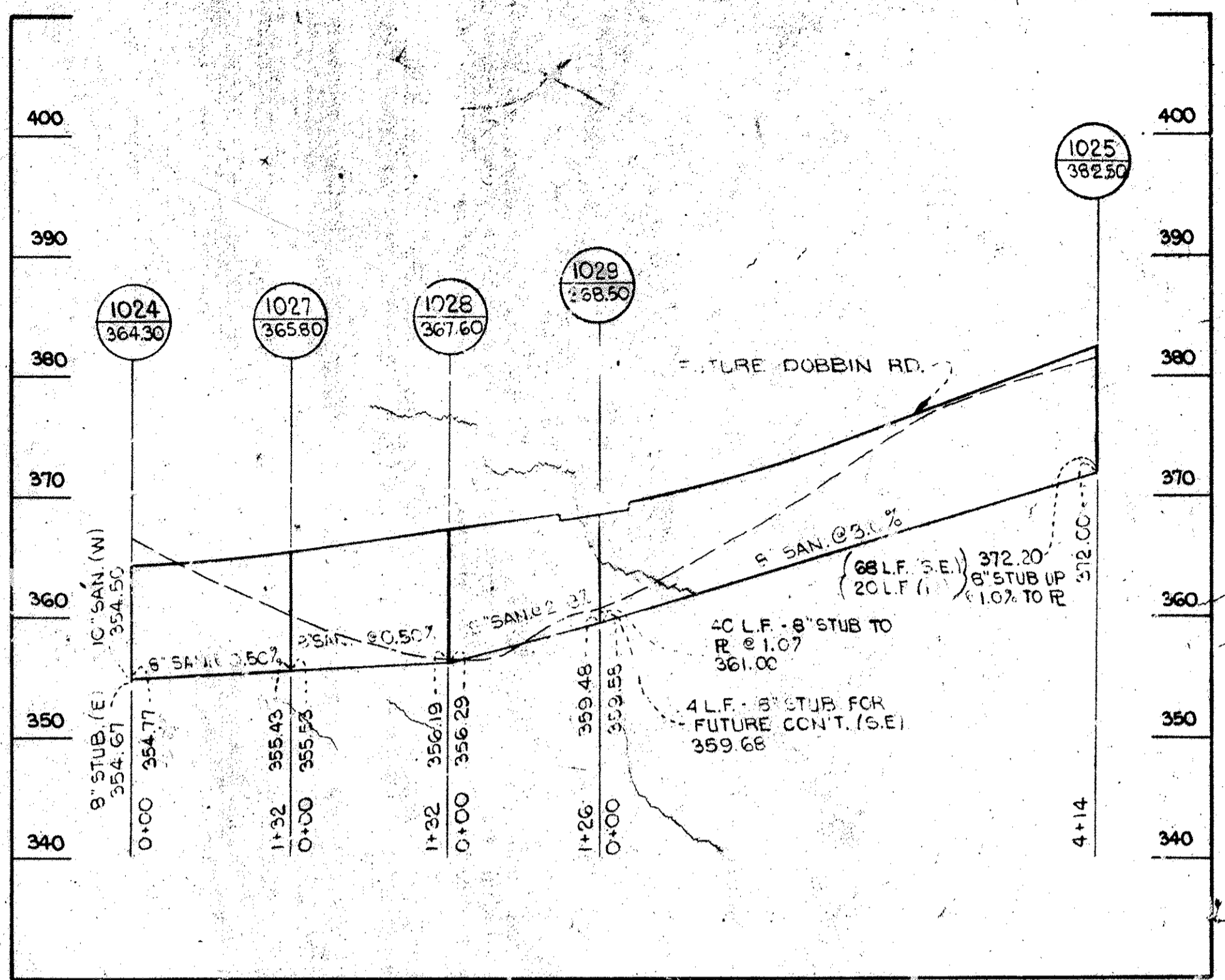
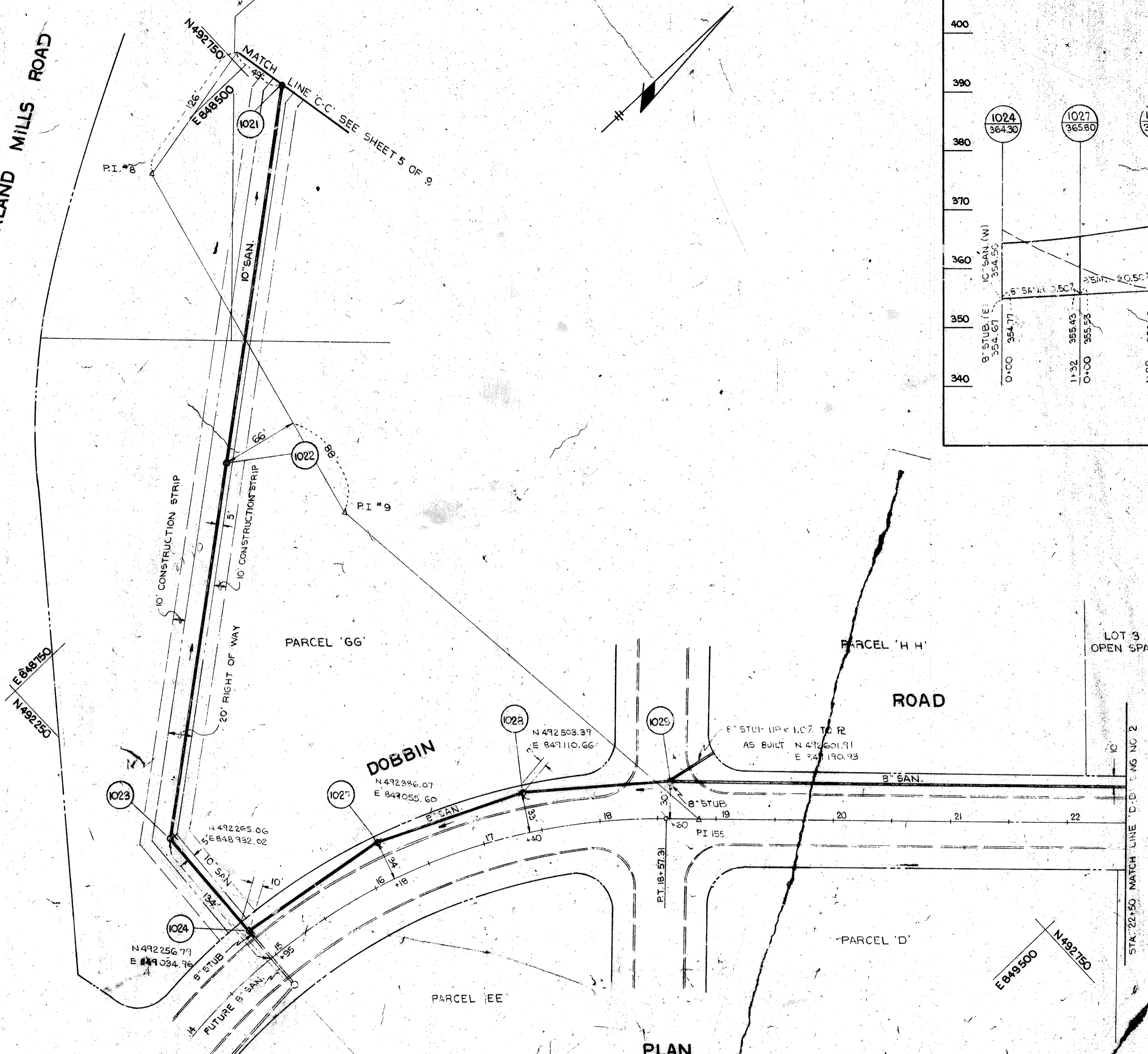


SECTION "A-A"



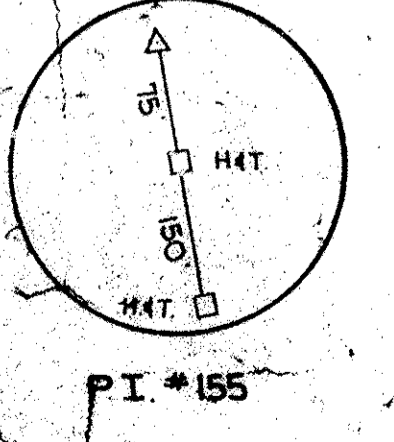
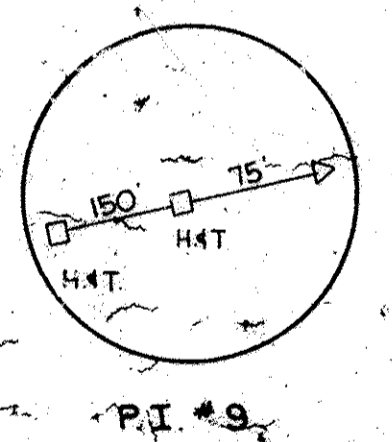
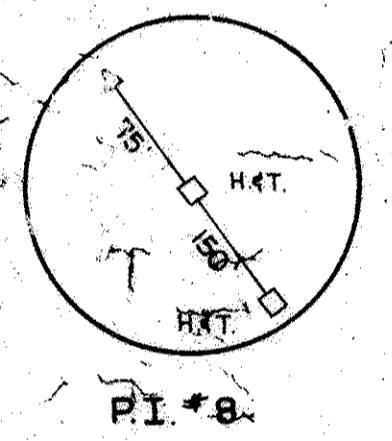
<p><b>GREEN ASSOCIATES, INC.</b> CONSULTING ENGINEERS BALTIMORE, MARYLAND</p>	<p><b>DEPARTMENT OF PUBLIC WORKS</b> HOWARD COUNTY, MARYLAND 9-6-72 DATE</p> <p><i>W. O. Lubert</i> CHIEF - BUREAU OF WATER AND SEWER</p>	<p>CONTRACT NO. 483-D-W&amp;S</p>	<p>DETAIL 16" VALVE VAULT</p>	<p>COLUMBIA SIELING INDUSTRIAL CENTER ELECTION DISTRICT GUILFORD NO 6</p>	<p>DRAWING NO. 9 OF 9</p>	<p>SCALE 1/2"=1'-0"</p>
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OAKLAND MILLS ROAD



PROFILE  
1" = 100' HOR.  
1" = 10' VERT.

PLAN  
1" = 50'



PRINTED

NOV 28 1972  
GREEN ASSOCIATES, INC.  
BALTIMORE, MD.

GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

CONTRACT NO. 483-D-1973

PLAN & PROFILE OF  
SEWER MAIN

COLUMBIA  
SIELING INDUSTRIAL CENTER  
ELECTION DISTRICT GUILFORD NO 6

DRAWING  
NO. 9A  
OF 9

SCALE  
AS  
SHOWN

WS 483 W&S/9.A